IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of	:	Group Art Unit: 2143
	:	Examiner: Anish Sikri
Oliver Keren Ban	:	
Serial No: 10/727,321	:	
	:	
Filed: 12/03/2003	:	International Business
Title: ADAPTIVE TWO-DIMENSION	:	Machines Corporation
INTER-PACKET HEADER	:	Intellectual Property Law
COMPRESSION	:	Department (RPS)
	:	Systems & Technology Group
	:	3039 Cornwallis Road
	:	Research Triangle, NC 27709
	:	Customer No. 46,242
Date: *August 27, 2008*	:	

BRIEF ON APPEAL

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is an Appeal from the Final Rejection of Claims 1-15 of this Application dated April 1, 2008. Section VIII. Appendix containing a copy of each of the Claims is attached.

I. Real Party in Interest

The real party in interest is International Business Machines Corporation, the assignee of the present Application.

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II. Related Appeals and Interferences
None.

III. Status of Claims

A. TOTAL NUMBER OF CLAIMS IN APPLICATION

There are 15 claims in this Application.

B. STATUS OF ALL THE CLAIMS

1. Claims cancelled: None.
2. Claims withdrawn from consideration but not cancelled: None.
3. Claims pending: 1-15.
4. Claims allowed: None.
5. Claims rejected: 1-15.

C. CLAIMS ON APPEAL

Claims on appeal: 1-15.

IV Status of Amendments

No amendments have been filed after Final Rejection.

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V. Summary of Claimed Invention

The present invention is directed to in a communication network with user access via a plurality of data processor controlled interactive display terminals for sending and receiving broadcasting packets, an electronic document distribution system for routing broadcasting packets from a sending server to a receiving server comprising means for temporarily storing a broadcasting payload inside a broadcasting router as a coded header by temporarily coding the broadcasting payload to a set of symbols, means for temporarily stripping the broadcasting payload from the broadcasting packet, means for temporarily replacing the stripped broadcasting payload with a set of coded symbols in the broadcasting packet, means for adding the coded symbols to a header of the broadcasting packet, means for transmitting the coded header of the broadcasting packet to the receiving server via the broadcasting router, means for transmitting the broadcasting payload to its coded header in the receiving server via the broadcasting router, and means for converting the coded set of symbols of the broadcasting payload from its coded format to form a full broadcasting packet in the receiving server.

Accordingly, the present invention as defined in independent claim 1 provides in a communication network with user access via a plurality of data processor controlled interactive display terminals for sending and receiving broadcasting packets, an electronic document distribution system for routing broadcasting packets from a sending server to a receiving server comprising (Application page 5, line 5 through page 8, line 6; and Figs. 1 and 2):

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means for temporarily storing a broadcasting payload inside a broadcasting router as a coded header by temporarily coding the broadcasting payload to a set of symbols (Application page 5, line 21 through line 25; page 7, line 19 through line 29; page 8, line 7 through line 15; Fig. 2, items 25, 23, 37, 47, 32, and 38);

means for temporarily stripping the broadcasting payload from the broadcasting packet (Application page 7, line 29 through line 30; and Fig. 2, item 32);

means for temporarily replacing the stripped broadcasting payload with a set of coded symbols in the broadcasting packet (Application page 7, line 30 through line 31; and Fig. 2, item 38);

means for adding the coded symbols to a header of the broadcasting packet (Application page 7, line 19 through line 23; page 7, line 31 through page 8, line 6; Fig. 1, items 23, 37, and 47; and Fig. 2, items 32, 38);

means for transmitting the coded header of the broadcasting packet to the receiving server via the broadcasting router (Application page 7, line 19 through line 23; page 7, line 31 through page 8, line 6; Fig. 1, items 23, 37, and 47; and Fig. 2, items 32, 38);

means for transmitting the broadcasting payload to its coded header in the receiving server via the broadcasting router; (Application page 7, line 19 through line 23; page 7, line 31 through page 8, line 6; Fig. 1, items 23, 37, and 47; and Fig. 2, items 32, 38); and

means for converting the coded set of symbols of the broadcasting payload from its coded format to form a full broadcasting packet in the receiving server (Application page 7, line 19 through line 23; page 7, line 31 through

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page 8, line 6; Fig. 1, items 23, 37, and 47; and Fig. 2,
items 32, 38).

The present invention as defined in independent claim 6
provides in a communication network with user access via a
plurality of data processor controlled interactive display
terminals for sending and receiving broadcasting packets, a
method of distributing transmitted electronic documents for
routing broadcasting packets from a sending server to a
receiving server including the steps of (Application page 8,
line 7 through page 9, line 5; Figs. 3 and 4):

storing a broadcasting payload inside a broadcasting
router as a coded header by coding the broadcasting payload
to a set of symbols temporarily (Application page 8, line 7
through line 10; page 8, line 24 through line 26; Fig. 3,
step 72; and Fig. 4, step 82);

stripping the broadcasting payload temporarily from the
broadcasting packet (Application page 8, line 15 through
line 17; page 8, line 26 through line 27; Fig. 3, step 73,
and Fig. 4, steps 83 and 84);

replacing the broadcasting payload temporarily with a
set of coded symbols in the broadcasting packet (Application
page 8, line 26 through line 29; and Fig. 4, step 85);

adding the coded symbol to a header of the broadcasting
packet (Application page 8, line 17 through line 19; page 8,
line 26 through line 29; Fig. 3, step 74, and Fig. 4, step
85);

transmitting a coded header of the broadcasting packet
to the receiving server via the broadcasting router
(Application page 8, line 17 through line 19; page 8, line

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26 through line 29; Fig. 3, step 74, and Fig. 4, step 85);

transmitting the broadcasting payload to its coded header in the receiving server via the broadcasting router (Application page 8, line 17 through line 19; page 8, line 26 through line 29; Fig. 3, step 74, and Fig. 4, step 85); and

converting the coded set of symbols of the broadcasting payload from its coded format to form a full broadcasting packet in the receiving server (Application page 8, line 17 through line 19; page 8, line 26 through line 29; Fig. 3, step 74, and Fig. 4, step 85).

The present invention as defined in independent claim 11 provides a computer readable medium storing a computer program which when executed performs the implementation for distributing electronic documents in a communication network with user access via a plurality of data processor controlled interactive display terminals for sending and receiving broadcasting packets, said program for routing broadcasting packets from a sending server to a receiving server comprising (Application page 9, line 6 through line 17; Application page 5, line 5 through page 8, line 6; and Figs. 1 and 2):

means for temporarily storing a broadcasting payload inside a broadcasting router as a coded header by temporarily coding the broadcasting payload to a set of symbols (Application page 5, line 21 through line 25; page 7, line 19 through line 29; page 8, line 7 through line 15; Fig. 2, items 25, 23, 37, 47, 32, and 38);

means for temporarily stripping the broadcasting payload from the broadcasting packet (Application page 7,

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line 29 through line 30; and Fig. 2, item 32);

means for temporarily replacing the stripped broadcasting payload with a set of coded symbols in the broadcasting packet (Application page 7, line 30 through line 31; and Fig. 2, item 38);

means for adding the coded symbols to a header of the broadcasting packet (Application page 7, line 19 through line 23; page 7, line 31 through page 8, line 6; Fig. 1, items 23, 37, and 47; and Fig. 2, items 32, 38);

means for transmitting the coded header of the broadcasting packet to the receiving server via the broadcasting router (Application page 7, line 19 through line 23; page 7, line 31 through page 8, line 6; Fig. 1, items 23, 37, and 47; and Fig. 2, items 32, 38);

means for transmitting the broadcasting payload to its coded header in the receiving server via the broadcasting router; (Application page 7, line 19 through line 23; page 7, line 31 through page 8, line 6; Fig. 1, items 23, 37, and 47; and Fig. 2, items 32, 38); and

means for converting the coded set of symbols of the broadcasting payload from its coded format to form a full broadcasting packet in the receiving server (Application page 7, line 19 through line 23; page 7, line 31 through page 8, line 6; Fig. 1, items 23, 37, and 47; and Fig. 2, items 32, 38).

Dependent claims 2-5,7-10, and 12-15 cover a further embodiment of the above described claimed invention wherein a broadcasting payload of the broadcasting packet is reduced to a coded header of the broadcasting packet. The coded

header of the broadcasting packet is received and the broadcasting payload that corresponds to the set of coded symbols in the coded header is patched from storage, and the broadcasting payload is relayed to a destination router according to its address to form the full broadcasting packet. The document distribution system is an electronic mail distribution system associated with electronic mail sources. The communications network is a distributed network, the broadcasting payloads are digitized packets, and the network distribution system is a network server system. (Application page 7, line 31 through page 8, line 6; page 8, line 10 through line 13; page 9, line 1 through line 5; Fig. 2, items 13, 38, 11, 32, and 38; Fig. 3, step 71; and Fig. 4, steps 87-90).

VI. Grounds of Rejection

Claims 1-15 are rejected under 35 U.S.C. 103(a) over Krause (US Pub 2005/0180568), in view of Lacy et al. (US Pub 2004/0205485), and in further view of Karim (US Pub 2003/0217108).

VII. Argument

Claims 1-15 are unobvious over the combination of Krause (US Pub 2005/0180568), in view of Lacy et al. (US Pub 2004/0205485), and in further view of Karim (US Pub 2003/0217108), and thus, are patententable under 35 U.S.C. 103(a).

The Final Rejection of claims 1-15 as being

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unpatentable under 35 U.S.C. 103(a) over the combination of
Krause (US Pub 2005/0180568), in view of Lacy et al. (US Pub
2004/0205485), and in further view of Karim (US Pub
2003/0217108) is respectfully appealed.

The present invention involves an electronic mail
distribution method and system for routing broadcasting
packets from a sending server to a receiving server. The
invention temporarily strips the broadcasting payload from
the broadcasting packet, stores the stripped broadcasting
payload inside a broadcasting router as a coded header by
coding the payload to a set of symbols, and replaces the
payload in the packet, adds the coded symbols to a header of
the packet, then transmits the coded header to the receiving
server via the router, and the payload is transmitted to its
coded header in the receiving server via the router, where
the coded symbols of the payload are converted from their
coded format to form a full packet in the receiving server.

The three cited references, neither singly nor in any
combination suggest the specific implementation of the
present invention for such an electronic mail distribution
system or method that optimizes the slowest least efficient
routers so that the bottlenecks that currently exist in the
current art of transmitting broadcasting packets, such as
with the "packet switching" method of the cited prior art,
are eliminated.

Krause (US Pub 2005/0180568) The Basic Reference

The Examiner stated that Krause discloses a
communication network where a user can access via a
plurality of data processor controlled interactive display

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terminals for sending and receiving broadcasting packets, means for temporarily storing broadcasting payload, means for temporarily stripping the broadcasting payload from the broadcasting packet, means for transmitting the coded header of the broadcasting packet to the receiving server via the broadcasting router, means for transmitting the broadcasting payload to its coded header in the receiving server via the broadcasting router (See Krause, page 7, paras [0076-0077], page 10, para [0094], page 11, para [0102]).

The Examiner admitted that Krause fails to disclose an electronic document distribution system for routing broadcasting packets from a sending server to a receiving server, and relies upon Karim as disclosing this feature (See Karim, page 3, paras [0051], [0057]).

The Examiner also admitted that Krause fails to disclose inside a broadcasting router as a coded header by temporarily coding the broadcasting payload to a set of symbols and means for adding the coded symbols to a header of the broadcasting packet and means for converting the coded set of symbols of the broadcasting payload from its coded format to form a full broadcasting packet in the receiving server. The Examiner relies upon Lacy et al. as disclosing these features (See Lacy, page 1, paras [0008], [0011], and page 2, para [0021]).

The Examiner stated that while Krause discloses means for temporarily replacing the stripped broadcasting payload (See Krause, page 7, para [0077], page 10 [0094], page 11 [0102]), Krause fails to disclose with a set of coded

symbols in the broadcasting packet. The Examiner relies
upon Lacy as disclosing coded symbols in the broadcasting
packet (Lacy, page 1, para [0008], [0011], page 2, para
[0021]). The Examiner stated it would have been obvious to
incorporate the use of an electronic document distribution
system, taught by Karim, with incorporating the coding
payload with coded symbol of Lacy, in the system of Krause
for the purpose of generating and distributing packets
throughout the network/destination in a very efficient
manner to reduce network congestion.

Krause discloses a system and method for increasing the
number of services that can be encrypted with existing
conditional access equipment, and is used when many
digitally compressed programs are encrypted at the same
time. Only the most critical components of each compressed
video, audio, or data stream are selected and then sequenced
into a single stream. Additional formatting causes this
sequence of segments from multiple sources to appear as a
single continuous steam to the conditional access system.
Once encrypted, this stream is demultiplexed and the
components restored and resequenced into their respective
programs. However, the system of Krause is not an
electronic document distribution system for routing
broadcasting packets from a sending server to a receiving
server. And Krause does not disclose storing a broadcasting
payload inside a broadcasting router as a coded header by
temporarily coding the broadcasting payload to a set of
symbols, adding the coded symbols to a header of the
broadcasting packet, and converting the coded set of symbols
of the broadcasting payload from its coded format to form a

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full broadcasting packet in the receiving server, as claimed by the Applicants.

Lacy et al. (US Pub 2004/0205485) Fails to Make Up for the Deficiencies of the Krause Reference

The teachings in Lacy et al. fail to make up for these deficiencies in the Krause reference. Lacy discloses an apparatus for compressing media content. Lacy discloses inserting a data stream not associated with the media content into a compressed media content bit stream, wherein the inserted data stream is carried by at least one symbol in at least one initial data set associated with the DBCA, such as by using designated symbols in one or more Huffman codebooks for embedding a watermark in the compressed bit stream. (See Lacy, para. [0008]). Lacy further discloses that a plurality of predetermined portions of the media content can be compressed using data-based compression algorithms and grouped into a respectively different portion of the data frame. (See Lacy, para [0009]). "Initial data associated with each private data-based compression algorithm is encrypted and made publicly available when the data frames are made available. The encrypted initial data is grouped into a data envelope within a data frame that is preferably available no later than a first data frame containing media content compressed using the private data-based compression algorithm with which the encrypted initial data is associated, but can be made available during a later data frame." (See Lacy, para [0011]).

The watermarking technique used in Lacy is quite different from the coded header disclosed in the

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application. The application discusses how uneven speeds
currently exist between the originator and the final
receptors during message delivery because certain router
paths are slower than the rest of the other pathways,
limiting overall performance to the performance of the
slowest pathways. The application is directed to
strengthening the "weakest links" or optimizing the slowest
and least efficient routers, so that bottlenecks that
currently exist in the current art of transmitting
broadcasting packets are eliminated. (See application, page
3, lines 22-29).

Independent claims 1, 6, and 11 claim the broadcast
payload is stored inside a broadcasting router as a coded
header by coding the broadcasting payload to a set of
symbols temporarily, stripping the broadcasting payload
temporarily from the broadcasting packet, replacing the
broadcasting payload temporarily with a set of coded symbols
in the broadcasting packet, and adding the coded symbols to
a header of the broadcasting packet. The coded header of
the broadcasting packet is then transmitted to the receiving
server via the broadcasting router, and the broadcasting
payload is transmitted to its coded header in the receiving
server via the broadcasting router, where the coded set of
symbols of the broadcasting payload is converted from its
coded format to form a full broadcasting packet in the
receiving server. (See page 4, lines 2-13 of the
application, "Summary of the Present Invention"). The
application explains "packet switching" (see page 3, lines
13-29 of the application), and how a packet-switching

network handles information in small units, breaking long
messages into multiple packets before routing.

The application further states that "[T]hese multiple
packets that make up the full broadcasting packet are
referred to herein as 'broadcasting payload'." (See page 3,
lines 17-18). The application explains how each payload may
travel a different route, arriving at a receiver at
different times or out of sequence, where the receiver's
system then reassembles the original broadcasting
packet/message correctly.

The application has limited the use of the word
"symbol" to include data that is substantially smaller than
the contents of the broadcasting payload to which the set of
symbols would be coded to represent. The use of replacing
the broadcasting packet with coded symbol to header is
described in the application and the independent claims 1,
6, and 11 clearly state that the broadcasting payload is
stored temporarily inside a broadcasting router as a coded
header by coding the broadcasting payload to a set of
symbols temporarily, stripping the broadcasting payload
temporarily from the broadcasting packet, replacing the
broadcasting payload temporarily with a set of coded symbols
in the broadcasting packet, and adding the coded symbols to
a header of the broadcasting packet.

Independent claims 1, 6, and 11 also clarify that the
coded header of the broadcasting packet is transmitted to
the receiving server via the broadcasting router, and the
broadcasting payload is transmitted to the coded header it

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corresponds to in the receiving server via the broadcasting router, and that the coded set of symbols of the broadcasting payload is converted from its coded format to form a full broadcasting packet, i.e. restore the original broadcasting packet, in the receiving server.

Karim (US Pub 2003/0217108) Fails to Make Up for the Deficiencies of the Krause and Lacy References

The teachings in Karim fail to make up for these deficiencies in the basic Krause reference and the modifying Lacy reference. The Examiner stated that Karim discloses *an* electronic document distribution system for routing broadcasting packets from a sending server to a receiving server (See Karim at page 3, paras. [0051] and [0057]). Karim discloses a method to allow electronic mail users to engage in an interactive dialog session without needing any other information required by proprietary interactive communication mechanisms, like proprietary user identifications or proprietary protocols not generally available to users who do not belong or subscribe to a particular user or technology community. The Examiner references paras [0051] and [0057] of Karim, which discuss the different names of the communication methodology as MailSpeak, MailChat, MailRap, InterWrite (Karim, para [0051]), and describe Fig. 1 as having "a Client Computer system with User 100 or the Sender, the associate Mail Server (Block 103) which has the user registered and is capable of locating the intended recipient and route the mail packet accordingly to the recipient address specified by the sender." (See Karim, para [0057]). Karim is only cited by the Examiner with regard to the portion of

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Applicant's preamble in Applicant's independent claims regarding "an electronic document distribution system for routing broadcasting packets from a sending server to a receiving server", and nothing further regarding the invention.

Independent claims 1, 6, and 11 state that a set of symbols is used for coding the broadcast payload, and that the broadcast payload is removed or stripped from the packet. Pages 2 and 3 of the application explain the current art of packet switching, wherein headers are added in or stripped from a packet's payload between the server and the user terminal. Krause discloses such a current art method of stripping an Ethernet header, i.e., "Once the Ethernet headers have been stripped, the remaining MPEG data is stored in buffer 832, which releases the data at a rate that is compatible with the CA input port on the IRT." (See Krause, page 7, para [0077]). However, in the application, **the broadcast payload is stripped temporarily from the broadcast packet**, and replaced with the smaller set of symbols representing the broadcast payload. Therefore, Krause does not disclose a "means for temporarily stripping the **broadcasting payload** from the broadcasting packet" as stated in the Office Action (See Office Action, page 4, second para.), but merely states a current art method described by the application of packet switching, wherein a header is stripped from a packet's payload.

The Examiner further relied upon Krause as disclosing "means for temporarily replacing the stripped **broadcasting payload** ". However, Krause cannot replace what was not stripped in the first place, as shown above. In fact,

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Krause discloses replacing the **headers** and **not the broadcasting payload** (See Krause, pages 10-11, para [0102]), i.e. "As before, the MPEG **packet headers can be replaced** with a modified header by using the DRAM Output Module's overlay mode." (*emphasis added*). While the Examiner cites Lacy as disclosing "with a set of coded symbols", to overcome the shortcomings in Krause, Lacy does not disclose "temporarily replacing the stripped broadcasting payload". And the watermarking method used in Lacy is not the same as the coded header and set of symbols used in the application.

Page 3, lines 13-21 of the application define "broadcast payload" as the small units of information that has been broken from long messages into multiple packets before routing that make up the full broadcasting packet in a packet-switching network. And on page 4, lines 7-13, "broadcasting payload" is stated to refer to "the parts of the broadcasting packet that separate for transmission of the broadcasting packet to later reassemble and form a full broadcasting packet." Applicants understand that application explains that a broadcasting packet contains more than one payload, and that the independent claims describe only one broadcasting payload. It is understood that the claims show the method and system of addressing one payload, which can be used multiple times for multiple broadcasting payloads, as there would be no difference in the system or method for each payload, and no differences would arise depending on the number or amount of payloads.

Combination of Krause, Lacy, and Karim has been Made Solely in Light of Appellants' Own Teaching

Appellants submit that the Examiner's combination of Krause, Lacy, and Karim references is being made not with the requisite foresight of one skilled in the art, but rather with the hindsight obtained solely by the teaching of the present invention. This approach cannot be used to render Appellants' invention unpatentable. The Examiner has used Appellants' disclosure as a guideline, and the picked and combined elements from each of the Krause, Lacy, and Karim references based solely from Appellants' own teaching.

> "To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art references of record convey nor suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher." W. L. Gore, 721 F 2d at 1553, 220 USPQ, pp. 312-313.

> "One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." In re Fine, 5 USPQ 2d 1596 (C.A.F.C.) 1988.

Accordingly, it is submitted that the suggestion for combining Krause, with Lacy and Karim in the manner proposed by the Examiner could only come from Appellants' own teaching, and, thus, cannot form any basis for a combination of references.

Furthermore, even if the elements from Krause, Lacy, and Karim were to be combined in the manner suggested by Examiner, the combination would still lack significant

elements of the combination of the present invention, i.e.
there is no storing of a broadcasting payload inside a
broadcasting router as a coded header by coding the
broadcasting payload to a set of symbols temporarily
established in Krause, Lacy, or Karim, and there is no
stripping of the broadcasting payload temporarily from the
broadcasting packet, and adding the coded symbols to a
header of the broadcasting packet, transmitting of the coded
header to the receiving server via the broadcasting router,
transmitting of the broadcasting payload to its coded header
in the receiving server via the broadcasting router, and
converting the coded set of symbols of the broadcasting
payload from its coded format to form a full broadcasting
packet in the receiving server in Krause, Lacy, or Karim.

Examiner's Argument Regarding Specific Claims 1-15

The Examiner in responding to the Appellants' argument
states the Applicant's arguments with respect to claims 1-15
have been considered but are not persuasive.

**Appellants' Response to Examiner's Argument on Specific
Claims 1,6, and 11**

With respect to dependent claims 1, 6, and 11 which
cover the above described invention are submitted to be
patentable over the combination of Krause, in view Lacy, and
in further view of Karim, for all reasons set forth
hereinabove for the patentability of independent claims 1,
6, and 11.

**Claims 2-5, 7-10, and 11-15 are unobvious over the
combination of Krause (US Pub 2005/0180568), in view of Lacy**

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et al. (US Pub 2004/0205485), and in further view of Karim (US Pub 2003/0217108), and, thus, are patententable under 35 U.S.C. 103(a).

The Final Rejection of claims 2-5, 7-10, and 12-15 as being unpatentable under 35 U.S.C. 103(a) over the combination of Krause (US Pub 2005/0180568), in view of Lacy et al. (US Pub 2004/0205485), and in further view of Karim (US Pub 2003/0217108), is respectfully traversed.

Combination of Krause, Lacy, and Karim has been Made Solely in Light of Appellants' Own Teaching

Appellants submit that the Examiner's combination of Krause, Lacy, and Karim references regarding dependent claims 2-5, 7-10, and 12-15 is being made not with the requisite foresight of one skilled in the art, but rather with the hindsight obtained solely by the teaching of the present invention. This approach cannot be used to render Appellants' invention unpatentable for the reasons asserted herein.

Examiner's Argument Regarding Specific Claims 2, 7, and 12

The Examiner states that with regard to claims 2, 7, and 12, the Applicant's arguments have been considered but they are not persuasive. The Examiner states that Krause "*indicates* on how the header is stripped from the packet, leaving the payload (data) intact" (*emphasis added*). The Examiner further states that Lacy "*shows* on how information is coded and encapsulated" (*emphasis added*). The Examiner states it is common to a person skilled in the art to combine the header from Krause into a coded header with the

aid of Lacy's encapsulation methods.

It is apparent from reviewing Krause, Lacy, and Karim, that these references do not teach or disclose the current invention. It is also obvious in reviewing the Final Rejection that the Examiner must state that the references infer the methods of the current invention but cannot state that the invention is disclosed or taught by the references or show how or where in the references the invention is disclosed or taught.

It is submitted that Krause, Lacy, and Karim do not have any suggestion of Appellants' claimed element of reducing the broadcasting payload of the broadcasting packet to a coded header of the broadcasting packet.

Appellants' Response to Examiner's Argument on Specific Claims 2-5, 7-10, and 12-15

With respect to dependent claims 2-5, 7-10, and 12-15, these are submitted to be patentable over the combination of Krause, in view of Lacy, in further view of Karim for all reasons set forth hereinabove for the patentability of independent claims 1, 6, and 11.

With respect to dependent claims 2-5, 7-10, and 12-15, claims 2, 7, and 12 claim "reducing the broadcasting payload of the broadcasting packet to a coded header *of the broadcasting packet.*" Since Krause, Karim, and Lacy do not disclose this step, claims 2, 7, and 12 are patentable over the 35 USC 103 rejections. Claims 2, 7, and 12 depend from

claims 1, 6, and 11. For this reason and the reasons
described above, dependent claims 2, 7 and 12 are patentable
over the 35 USC 103 rejections and the cited art.
Claims 3, 8, and 13 are rejected under 35 USC 103.
Regarding the specification, Fig. 1 and page 6, lines 5-15
of the application show I/O devices connected to a system
bus via user interface adapter and display adapter, and a
keyboard and mouse interconnected to the bus through the
user interface adapter. "It is through such input devices
that the user at a *receiving* station may interactively
relate to the Web *in order to access Web documents*. Display
adapter includes a frame buffer, which is a storage device
that holds a representation of each pixel on the display
screen. Images may be stored in frame buffer for display on
monitor through various components, such as a digital to
analog converter and the like. *By using the aforementioned
I/O devices, a user is capable of…receiving output
information from the system via display (emphasis added)."*

Further, the application references Mastering the
Internet, G.H. Cady et al., published by Sybex Inc.,
Alameda, Ca, 1996, for details on Internet nodes, objects
and links, and for typical connections between local display
stations to the Web via network servers, any of which may be
used to implement the system on which the techniques
described in the application are used. (Application, page
6, lines 23-25, and page 7, lines 3-6). The application
describes that packets are created on either terminal 11 or
13 of Fig. 1, and sent via a narrow channel over the Web to
a receiving terminal 15. The Web Service Provider system
that may be based upon the POP (Post Office Protocol) system

manages the distribution of these packets, as well as the
distribution of other electronic documents and broadcasting
packets.

"A key to the present invention is the separate
temporary storage of the coded header of the broadcasting
payload in the broadcasting routers, which is then
transmitted to the receiving server via the broadcasting
routers. The corresponding document of the broadcasting
payload is transmitted to form a full broadcasting packet in
the receiving server." (Application page 7, lines 19-24).
Fig. 2 illustrates "a packet document or broadcasting packet
being transmitted by a sender, e.g. packet on sending
terminal 13…The broadcasting server 31 that temporarily
stores the broadcasting payload 32 of the broadcasting
packet in a coded header 38. This occurs by temporarily
coding the broadcasting payload 32 to a set of symbols,
temporarily stripping the broadcasting payload 32 from the
broadcasting packet, and temporarily replacing the
broadcasting packet with a coded symbol and adding the coded
symbol to the header 38. The sending terminal 13 is able to
transmit these coded headers 38 to the receiving terminal
11, where the broadcasting payload 32 is retrieved from
storage and the coded header 38 is patched to the
corresponding broadcasting payload 32. The broadcasting
payload 32 is relayed to a destination router according to
its address." (Application page 7, line24-page 8, line 4).

Fig. 4 also shows the features of "receiving the coded
header of the broadcasting packet and patching the
broadcasting payload that corresponds to the set of coded
symbols in the coded header from storage, and relaying the
broadcasting payload to a destination router according to

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its address to form the full broadcasting packet, of dependent claims 3, 8 and 13. "The coded header is then transmitted to the receiving server…The broadcasting payload is transmitted separately to its coded header…A full broadcasting packet is then formed in the receiving server when the broadcasting payload is relayed to its corresponding coded header according to its address." (Application page 8, lines 26-29).

Claims 3, 8 and 13 claim the coded header of the broadcasting packet is received and the broadcasting payload that corresponds to the set of coded symbols in the coded header is patched from storage, the broadcasting payload is relayed to a destination router according to its address to form the full broadcasting packet, unlike Krause, Karim, or Lacy, either alone or in combination. Claims 3, 8, and 13 depend from independent claims 1, 6, and 11, which are believed to be allowable over the 103 rejection and over Krause, Karim, and Lacy. For at least this reason and the reasons described above, dependent claims 3, 8, and 13 are patentable over the 103 rejection and the cited art.

Claims 4, 9, and 14 are rejected under 35 USC 103. The application references <u>Mastering the Internet</u>, G.H. Cady et al., published by Sybex Inc., Alameda, Ca, 1996, for details on Internet nodes, objects and links, and for typical connections between local display stations to the Web via network servers, any of which may be used to implement the system on which the techniques described in the application are used. (Application, page 6, lines 23-25, and page 7, lines 3-6).

The application also explains that the Web Service Provider system that may be based upon the POP (Post Office

Protocol) system manages the distribution of these packets, as well as the distribution of other electronic documents and broadcasting packets. The server system stores the in/out electronic documents of its clients at stations like 11 and 13 of Fig. 1 in storage facilities of limited capacity. The application describes a variation related to requested Web pages, wherein a Web page is requested by a Web station. An appropriate server at the Web site or Web page source gets the coded header, and the Web document is sent to the receiving display station. The broadcasting payload is transmitted to the coded header in the receiving display station to form the full broadcasting packet. (Application page 9, lines 1-5). Krause, Karim, and Lacy, either alone or in combination, do not disclose this step. Claims 4, 9, and 14 depend from independent claims 1, 6, and 11, and dependent claims 3, 8, and 13 discussed above, which are believed to be allowable over the 103 rejection. For at least this reason and the reasons described above, dependent claims 4, 9, and 14 are patentable over the 103 rejection, and over the cited art.

Claims 5, 10, and 15 are rejected under 35 USC 103. The application references Mastering the Internet, G.H. Cady et al., published by Sybex Inc., Alameda, Ca, 1996, for details on Internet nodes, objects and links, and explains that the Internet or Web is a global network of a heterogeneous mix of computer technologies and operating systems. "Higher level objects are linked to the lower level objects in the hierarchy through a variety of network server computers. *Digital packets are distributed through such a network.*" (emphasis added). (Application, page 6, lines 23-28).

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The application also mentions that "images may be stored in frame buffer for display on monitor through various components, such as a ***digital to analog converter.***" (Application page 6, lines 11-13).
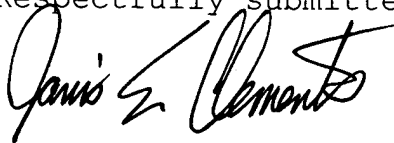

Dependent claims 2-5, 7-10, and 12-15 are submitted to be patentable over the combination of Krause, in view of Lacy, and in further view of Karim for all reasons set forth hereinabove for the patentability of independent claims 1, 6, and 11.

Conclusion

In view of the foregoing, claims 1-15 are submitted to be unobvious over the combination of Kenneth ("Email distribution list checking") in view of Sams ("Sams Teach Yourself Microsoft® Outlook® 2000 in 10 Minutes), and further in view of Daniel (US 2004/0051735)under 35 U.S.C. 103(a) and, thus, are patentable.

Accordingly, the Board of Appeals is respectfully requested to reverse the final rejection and find claims 1-18 in condition for allowance.

Respectfully submitted,

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VIII. Claims Appendix

1. In a communication network with user access via a
plurality of data processor controlled interactive
display terminals for sending and receiving broadcasting
packets, an electronic document distribution system for
routing broadcasting packets from a sending server to a
receiving server comprising:

   means for temporarily storing a broadcasting
   payload inside a broadcasting router as a coded
   header by temporarily coding the broadcasting
   payload to a set of symbols;
   means for temporarily stripping the broadcasting
   payload from the broadcasting packet;
   means for temporarily replacing the stripped
   broadcasting payload with a set of coded symbols
   in the broadcasting packet;
   means for adding the coded symbols to a header of
   the broadcasting packet;
   means for transmitting the coded header of the
   broadcasting packet to the receiving server via
   the broadcasting router;
   means for transmitting the broadcasting payload to
   its coded header in the receiving server via the
   broadcasting router; and
   means for converting the coded set of symbols of
   the broadcasting payload from its coded format to
   form a full broadcasting packet in the receiving
   server.

2. The system of claim 1 further comprising means in the
document distribution system for reducing the

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broadcasting payload of the broadcasting packet to a coded header of the broadcasting packet.

3. The system of claim 2 further comprising:

    means for receiving the coded header of the broadcasting packet and patching the broadcasting payload that corresponds to the set of coded symbols in the coded header from storage; and

    means for relaying the broadcasting payload to a destination router according to its address to form the full broadcasting packet.

4. The system of claim 3 wherein said document distribution system is an electronic mail distribution system associated with electronic mail sources.

5. The system of claim 3 wherein:

    said communication network is a distributed network;

    said broadcasting payloads are digitized packet; and

    said network distribution system is a network server system.

6. In a communication network with user access via a plurality of data processor controlled interactive display terminals for sending and receiving broadcasting packets, a method of distributing transmitted electronic documents for routing broadcasting packets from a sending server to a receiving server including the steps of:

    storing a broadcasting payload inside a broadcasting router as a coded header by coding the broadcasting payload to a set of symbols temporarily;

    stripping the broadcasting payload temporarily

from the broadcasting packet;

replacing the broadcasting payload temporarily
with a set of coded symbols in the broadcasting
packet;

adding the coded symbol to a header of the
broadcasting packet;

transmitting a coded header of the broadcasting
packet to the receiving server via the
broadcasting router;

transmitting the broadcasting payload to its coded
header in the receiving server via the
broadcasting router; and

converting the coded set of symbols of the
broadcasting payload from its coded format to form
a full broadcasting packet in the receiving
server.

7.   The method of distributing electronic documents of
claim 6 further including the step of reducing the
broadcasting payload of the broadcasting packet to a
coded header of the broadcasting packet.

8.   The method of distributing electronic documents of
claim 7 further including the steps of:

receiving the coded header of the broadcasting
packet and patching the broadcasting payload that
corresponds to the set of coded symbols in the
coded header from storage; and

relaying the broadcasting payload to a destination
router   according to its address to
form the full broadcasting packet.

9.   The method of distributing electronic documents of
claim 8 wherein said document distribution system is an

electronic mail distribution system associated with
electronic mail sources.

10. The method of distributing electronic documents of
claim 8 wherein:

      said communication network is a distributed
network;

      said broadcasting payloads are digitized packets;
and

      said network distribution system is a network
server system.

11. A computer readable medium storing a computer
program which when executed performs the implementation
for distributing electronic documents in a communication
network with user access via a plurality of data
processor controlled interactive display terminals for
sending and receiving broadcasting packets, said program
for routing broadcasting packets from a sending server to
a receiving server comprising:

        means for temporarily storing a broadcasting
        payload inside a broadcasting router as a coded
        header by temporarily coding a broadcasting
        payload to a set of symbols;

        means for temporarily stripping the broadcasting
        payload from the broadcasting packet;

        means for temporarily replacing the stripped
        broadcasting payload with a set of coded symbols
        in the broadcasting packet;

        means for adding the coded symbols to a header of
        the broadcasting packet;

        means for transmitting the coded header of the
        broadcasting packet to the receiving server via

the broadcasting router;

transmitting the broadcasting payload to its coded
header in the receiving server via the
broadcasting router; and

means for converting the coded set of symbols of
the broadcasting payload from its coded format to
form a full broadcasting packet in the receiving
server.

12.   The computer readable medium of claim11 further
including means in the document distribution system for
reducing the broadcasting payload of the broadcasting
packet to a coded header of the broadcasting packet,

13.   The computer readable medium of claim 12 further
including:

means for receiving the coded header of the
broadcasting packet and patching the broadcasting
payload that corresponds to the set of coded
symbols in the coded header from storage; and

means for relaying the broadcasting payload to a
destination router   according to its
address to form the full broadcasting packet.

14.   The computer readable medium of claim 13 wherein
said document distribution system is an electronic mail
distribution system associated with electronic mail
sources.

15.   The computer readable medium of claim 13 wherein:
said communication network is a distributed
network;

said broadcasting payloads are digitized packets;
and

said network distribution system is a network server system.

IX. Evidence Appendix

There was no evidence presented in the prosecution of the present Application.

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X. Related Proceedings Appendix

There are no proceedings related to the present proceedings.

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